# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of the Commission's Rules	)	WT Docket No. 02-318
Concerning Airport Terminal Use Frequencies	)	RM-10184
in the 450-470 MHz Band of the Private	)	
Land Mobile Radio Services	)	

# Joint Comments Of FIT and MRFAC

Forest Industries Telecommunications ("FIT") and MRFAC, Inc.

("MRFAC"), hereby submit these Joint Comments in response to the

Commission's Notice of Proposed Rulemaking in the above-captioned

proceeding.¹ Herein FIT and MRFAC recommend that the Commission modify

its rules as described below to allow more normal functionality for mobile non
Airport Terminal Use facilities authorized at distances greater than 50 miles from

airports designated in Section 90.35(c)(61)(iv) of the Commission's rules.

-1-

See Notice of Proposed Rulemaking, Amendment of the Commission's Rules Concerning Airport Terminal Use Frequencies in the 450-470 MHz Band of the Private Land Mobile Radio Services, WT Docket No. 02-318, RM-10184 (rel. October 10, 2002) ("NPRM").

#### I. Introduction

The *NPRM* seeks to revise the use of Airport Terminal Use ("ATU") frequencies in the 450-470 MHZ Private Land Mobile Radio Industrial/Business Pool. The proposals, as initiated by a Petition for Rulemaking filed by the Personal Communications Industry Association<sup>2</sup> include: 1) deleting the 3-watt total output power ("TPO") limit for transmitters operating on ATU mobile-only frequencies and adopting a general effective radiated power ("ERP") standard; 2) converting the power limit for base transmitters operating on ATU base/mobile frequencies from 20-watts TPO to 100-watts ERP; and 3) modifying the FCC's Universal Licensing System ("ULS") to recognize ATU frequencies. The *NPRM* seeks comment on these and several other issues.

FIT is a trade association representing the land mobile communications interests of the forest products industry, and it is also a certified frequency coordinator. It has been coordinating frequencies for that industry for over fifty years and is one of the coordinators of the frequencies in the Industrial/Business radio pool. MRFAC is one of the Commission's certified frequency coordinators for the private land mobile bands from 30 to 900 MHz. It began operation as the frequency coordinating arm for the National Association of Manufacturers. For the past 23 years MRFAC has operated independently, providing coordination and licensing-related services, particularly for manufacturers and other industrial and business entities.

\_

See Petition for Amendment of the Commission's Rules Regarding the Airport Terminal Use Frequencies, RM-10184, filed by PCIA on June 25, 2001.

Many of the members and clients of FIT and MRFAC operate on the ATU channels that are the subject of the *NPRM*. FIT and MRFAC are members of the Land Mobile Communications Council and support the consensus comments filed by that organization. However, FIT and MRFAC have further comments that are intended to result in better utilization of the ATU channels by secondary users.

### II. The Commission Should Modify its Rules to Promote Normal Operation of Mobile Non-ATU Facilities.

As noted in paragraph 14 of the *NPRM*, Industrial/Business ("*IB*") eligibles may use the frequencies assigned to ATU, for non-ATU operations on a secondary basis, and subject to certain limitations on location and power. In paragraph 15 of the NPRM, the Commission seeks comments on the impact that the original PCIA proposal would have on such secondary users.

FIT and MRFAC note that the current rules create an unusual set of circumstances for *IB* licensees wishing to operate beyond 50 miles from the airports identified for ATU use. In the background discussion of these channels in paragraph 14, the *NPRM* uses the term "normal use" for *IB* stations located 75 miles or more from the borders of designated airports, and "300 Watt ERP operations" for stations at locations 50 miles or more from airports with designated ATU channels. The Commission does not further define "normal", but one would conclude this to mean at equal or similar power levels as most other UHF *IB* channels, in either a simplex mode or repeater style of operation.

However, an ambiguity in the Rules precludes "normal" operations from occurring. The 460.xxx side of the channel pairs are subject to the provisions of

Section 90.35(c)(61)(ii) of the Commission's rules, thus giving eligible users the opportunity to apply for up to 300 watt ERP facilities for the base, while providing no power restrictions for mobiles operating on a simplex mode. This is consistent with most other *IB* UHF channels. However the mobile side of the channel pair, *i.e.* the corresponding 465.xxx frequency, carries an absolute limit of 2 watts, pursuant to the limitation in Section 90.35(c)(11). There is no provision for mobiles beyond 50 miles to operate with anything more than 2 watts on the 465.xxx channels.

The result is that if licensees operate solely in the simplex mode, *i.e.* on 460.725 MHz, they are afforded the opportunity for "normal" operations with a fairly high ERP limit. However, if they wish to utilize the total frequency pair in a repeater configuration, *e.g.,.* 460.725/465.725 MHz, then they may have a repeater with up to 300 Watts ERP and mobiles in a talk-around mode on the base station frequency with 100 Watts ERP or more. However, the mobiles talking through the repeater, on the repeater input channel at 465.725 MHz, are only allowed to operate at 2 watts. FIT and MRFAC submit that this is hardly "normal". This power limitation severely restricts the talk-back range from the mobiles to a range of just a few miles, even though the 300 Watt ERP repeater may have a service contour of 20 or 30 miles. This power level imbalance severely restricts the reasonable use of these frequencies at distances exceeding 50 miles from ATU use.

FIT and MRFAC thus suggest that the Commission increase the authorized power for mobiles on the 465.xxx MHz channels operating in

conjunction with repeater stations located beyond the required distance away from referenced airports. This proposed change should not significantly impact ongoing ATU operations any more than that which would be expected from currently allowed high power simplex operations. Since ATU mobiles, bases and control stations generally monitor the 460.xxx MHz side of the frequency pair, they are more likely to hear the 300 Watt ERP base or repeater station. This is because the base or repeater is typically on a tower structure, high ground or a hill. The mobiles, whether vehicular or portable, are typically restricted to uses at close to ground level, and thus their coverage is limited by terrain variations, buildings and foliage.

FIT and MRFAC assert that now is the time to correct this imbalance of authorized mobile power to allow truly "normal" use of the ATU channels in areas beyond 50 miles from ATU operations. This can be easily accomplished by either amending the limitation in Section 90.35(c)(11), or adding a new limitation to the 465.xxx ATU channels providing that "at distances beyond 50 miles from airports listed in Section 90.35(c)(61)(ii), mobile power up to 120 Watts ERP will be authorized." This mobile ERP level is consistent with licensee use of an ordinary 60 watt TPO mobile transmitter with a 3.2 db gain colinear or baseloaded mobile antenna. This installation is typical of many licensees, especially in the more rural areas, who require reliable coverage and mobile talk-back power to overcome terrain or other propagation obstacles. The mobile's gain

\_

In following the above recommendation, it should be noted that the Commission would have to take no action regarding "grandfathered" operations beyond 50 miles from ATU airports that have inadvertently been licensed at higher power. See NPRM at para. 16.

antenna not only enhances the mobile transmit power, but improves the received signal in the mobile from the base or repeater, thus enhancing reliability. The Part 90 rules generally do not specify any TPO or ERP mobile RF power limits on the regular, "full power" channels. The recommended ERP power level is in line with mobile ERP levels authorized on a consistent basis on the remainder of the UHF I/B "full power" channels.

### III. Conclusion

The Commission should modify its rules as described above to allow more normal functionality for mobile non-ATU facilities authorized at distances beyond 50 miles from designated ATU airports.

Respectfully submitted,

MRFAC, INC.

FOREST INDUSTRIES TELECOMMUNICATIONS

By: <u>/s/ Marvin McKinley</u>
Marvin McKinley
President
899-A Harrison Drive SE
Leesburg, VA 20175
800-262-9206

By: /s/ Kenton Sturdevant
Kenton Sturdevant
Executive Vice President
871 Country Club Road
Eugene, OR 97401
541-485-8441

December 23, 2002